

BRITISH ASSOCIATION
for the Advancement of Science

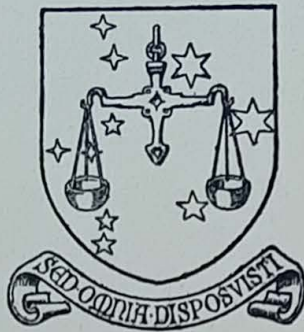


Historical and Descriptive
CATALOGUE
of the
DARWIN MEMORIAL
at
DOWN HOUSE
DOWNE, KENT

*'Here Darwin thought and worked
for forty years, and died, 1882'*

PRICE SIXPENCE

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DARWIN

CHARLES ROBERT DARWIN, whose name as a naturalist is among the most famous in the history of science and of human thought, was born at Shrewsbury on February 12, 1809, and died at Down House on April 19, 1882. His father was Dr. Robert Waring Darwin (1766-1848) of Shrewsbury; his grandfather was Dr. Erasmus Darwin (1731-1802), born at Elton near Newark, subsequently of Nottingham, Lichfield and Derby. Both were distinguished physicians: Erasmus Darwin was also poet, philosopher, and inventor. Of him there are several relics in the Down House collection. Charles Darwin's mother was Susannah Wedgwood (1765-1817), a daughter of Josiah Wedgwood, the famous manufacturer of pottery. In 1839 Darwin married his cousin Emma Wedgwood; these family connections explain the recurrence of the name of Wedgwood in the collection.

Darwin was educated at Shrewsbury School, Edinburgh University, and Cambridge University. Of his interest in natural science, early apparent, the school curriculum took no account, nor was he naturally fitted for the medical training for which he was sent to Edinburgh. But at Edinburgh, and still more at Cambridge, he came under the influence of leaders in science, his true bent was discovered, and as a result he was led to apply for the post of naturalist on H.M.S. *Beagle*, and accompanied the ship in that capacity on her voyage round the world in 1831-36. His notes, his diary of the voyage (which remain with us) and his collections of geological, botanical, and zoological specimens show how the foundations of his scientific beliefs and future researches, and of his future fame, were established during this voyage.

After his return to England his health became poor, and continued so to the end of his life. For a short time after their marriage he and Mrs. Darwin made their home in London, but life there suited him ill, and after extended search they found Down House, and were attracted by its rural seclusion within not too difficult reach of London. Darwin's father, Dr. Robert Darwin, bought the house for him and he took up his residence there on September 14, 1842. His two eldest children, William and Anne, were born in London; the third, Mary, was born and died just after arrival at Down. Then followed in 1843 Henrietta, who became Mrs. Litchfield; in 1845 George, who became Sir George Darwin, F.R.S., and was president of the British Association. His son, Sir Charles Galton Darwin, F.R.S., succeeded to the ownership of Down and is the fifth of a succession of father and son who have been elected Fellows of the Royal Society—a unique record. In 1847 Elizabeth Darwin was born; in the following year Francis, who became Sir Francis Darwin, F.R.S.—a distinguished botanist and president of the British Association, whose son, Bernard Darwin, C.B.E., became very well known as a writer, and as an authority on sport, and particularly golf. Leonard followed in 1850—Major Leonard Darwin, R.E., scientist, philanthropist and for seventeen years president of the Eugenics Society. Then came Horace, afterward Sir Horace Darwin, F.R.S., distinguished as a designer of scientific instruments. And last, the tenth, Charles Waring Darwin, who died in childhood. Down House was thus the home of a large and most gifted family.

During the forty years of his residence at Down, Darwin made the second abstract of his theory of evolution (1844; the first was made in 1842 before he came to Down); he wrote his researches on the *Zoology of the Beagle*, on *Coral Reefs*, and prepared a new edition of the *Naturalist's Voyage*. Before he settled down to work at *Barnacles*, to which he gave seven years (1847-54), he prepared his papers

Volcanic Islands and on the *Geology of South America*. Preparations for the *Origin of Species*, which did not receive its final form until 1859, went on continuously from 1842 onwards. Then followed his enquiries into *Fertilisations of Orchids* (1862), *Variations of Animals and Plants under Domestication* (1868), *Descent of Man* (1871), *The Expression of the Emotions* (1872), *Movements and Habits of Climbing Plants* (1875); *Insectivorous Plants* appeared in the same year; *Cross and Self Fertilisation* in 1876, and his last work of all, one which was begun soon after he settled at Down, *The Formation of Vegetable Mould through the Action of Worms*.

No single home in the world can show such a record. Truly from Down Charles Darwin shook the world and gave human thought an impress which will endure for all time. Down is a priceless heirloom not only for England but for the civilised world. One of the greatest men in history lived there. Those who in this place view the many representations of his features, nearly all bearing the grave stamp of the profound student, may be reminded of the very wide affection which he inspired, not least among his fellow dwellers in Down. And this word-picture by a member of his family may be quoted: 'When he was excited with pleasant talk his whole manner was wonderfully bright and animated, and his face shared to the full in the general animation. His laugh was a free and sounding peal, like that of a man who gives himself sympathetically and with enjoyment to the person and the thing which have amused him.' To his wife and her constant care of him he owed more than can be told, and the world's debt to her can scarcely be less than to him, for without that care his work could hardly have been accomplished. Mrs. Darwin died in 1896.

DOWN HOUSE

Our earliest knowledge of the Down House property dates from 1681, when a Kentish yeoman family acquired

most of the land which it now includes, and probably built a farmhouse on it. Possibly some of the flint-built walls belong to this period. The central block of the house as it stands appears to date from the later part of the 18th century, but Darwin added the bay on the garden front, and, in 1877, the north wing with the verandah.

At the Annual Meeting of the British Association in 1927 Sir Arthur Keith, F.R.S., as President, made an appeal for the preservation of Down House as a memorial of Darwin. An immediate response came from Mr. (afterwards Sir) Buckston Browne, F.R.C.S., who forthwith acquired the property, and after restoring the house transferred its possession to the British Association (January 7, 1929), with an endowment towards its maintenance. The memorial rooms were opened to the public on June 7, 1929. The donor desired the property to be regarded as a gift in custody for the nation and to be open to visitors without charge. He also desired that the Association should take any opportunity of using the house and grounds for the benefit of science. He devoted himself to getting together a Darwin collection for Down, and obtained willing co-operation and assistance from members of the Darwin family and others.

Of the memorial rooms, all on the ground floor, the Old Study, where all Darwin's major work was done, is decorated and furnished almost as he used it; the New Drawing-room also contains much of his furnishings. The New Study contains many relics of him and also of Erasmus Darwin and other members of the family. The Old Drawing-room (later the dining-room) is now called the Donor's Room, because Sir Buckston Browne filled it with fine furniture and pictures from his own collection, appropriate to Darwin's family connections or their times. The Old Dining-room contains portraits of a long line of great scientific workers who have occupied the presidential chair of the British Association, and some of the banners

which used to mark their terms of office. Outside the house, much of the garden remains as Darwin knew it. Here are his greenhouse and experimental laboratory, and a curious area of concrete, an early example of a hard tennis court (1881). Above all, the shaw or little wood known as the Sandwalk, from the sandy loam with which its path was dressed, was a usual scene of Darwin's daily exercise; it was known also as his 'thinking-path,' for here as he walked he thought over his work.

The spelling of the village name as Down was current in Darwin's time and has therefore been retained for the house; the earlier form, Downe, was revived more recently.

THE DONOR

Sir George Buckston Browne (1850-1945) was born in Manchester of a line of medical men, of whom the earliest, Dr. Theophilus Browne, was a fellow-townsmen of Dr. Erasmus Darwin in Derby. In 1866 Buckston Browne matriculated as a student of London University, entered University College, was awarded medals in anatomy, chemistry and midwifery, and gained the gold medal for practical chemistry and the Liston gold medal in surgery. He became a member of the Royal College of Surgeons in 1874 and gained in open competition the house-surgeoncy to his hospital (University College Hospital), where he served under Sir John Erichsen. He also taught anatomy under Prof. George Viner Ellis.

After his term in hospital, Buckston Browne was invited by Sir Henry Thompson, one of the most distinguished surgeons of the Victorian era, to become his assistant and afterwards collaborator; and in 1884 he began practice on his own account. He contributed important articles to the literature of his profession, including the Harveian Lectures of 1901. In 1926 the Council of the Royal College of Surgeons completed his fellowship, and later made

him a trustee of the Hunterian Collection, presented him with their honorary gold medal, in recognition of his professional services, and placed his bust in bronze upon their staircase. He was knighted in 1932.

In 1931 he presented to the College land and an endowment fund to enable the establishment of a surgical research station, the Buckston Browne Research Farm. The land adjoins that of the Down House property. These two great gifts, to the British Association and the Royal College of Surgeons, may be said to have re-established the scientific tradition of Downe.

THE MEMORIAL ROOMS

In the catalogue which follows, objects which belonged to Darwin, or were directly associated with the house and his family, are indicated by asterisks *.

The Hall

*Arundel Prints :

- 1 Pinturricchio, Christ among the Doctors. (Spello, 1857.)
- 2 Sanzio, Virgin and Child with Saints, and the Resurrection of Christ. (Cagli, 1859.)
- 3 *Nature Study in Oils, unsigned, presented to Dr. Robert Darwin, father of Charles Darwin, by a patient.

*Arundel Prints (continued) :

- 4 Masaccio, The Tribute Money. (Florence, 1861.)
- 5 Francia, The Burial of St. Cecilia. (Bologna, 1862.)
- 6 Francia, The Marriage of St. Cecilia. (Bologna, 1862.)
- 7 Ghirlandajo, The Death of St. Francis. (S. Trinita, Florence, 1860.)
- 8 Ordnance Survey Map, 1842, showing the name Down (not Downe).

9 *Arundel Print: Raphael, the Poets on Mount Parnassus. (Vatican, 1873.)
Grandfather clock by Thomas Wright, Swaffham, Norfolk, in Chippendale mahogany case.

10 Window glass from pantry at Elston Hall, Newark, on which are written with a diamond the names of Susannah and Erasmus Darwin.

11 *Darwin: pastel sketch by Samuel Laurence, 1853.

12 Dr. Erasmus Darwin: engraving from a portrait by J. Wright, of which the original is in the Donor's Room.

Erasmus Darwin (1731-1802), grandfather of Charles Darwin, was physician, poet and philosopher, established a dispensary at Lichfield, and achieved high standing in his profession. He was offered but declined the position of physician to King George III. He founded the Philosophical Society at Derby, published botanical and other works, and 'maintained a form of evolutionism subsequently expounded by Lamarck.' (*Dict. Nat. Biog.*)

13 *Dr. R. W. Darwin: engraving by Thomas Lupton, after a portrait by James Pardon.

Robert Waring Darwin (1766-1848), physician, father of Darwin, who ascribed to him as out-standing characteristics 'a keen power of observation and knowledge of men, qualities which led him to read the characters and even the thoughts of those whom he saw even for a short time.' He was a singularly successful country doctor.

14 *Mrs. Darwin, from a portrait by George Richmond, R.A.

She was Emma Wedgwood (1808-96), daughter of Josiah Wedgwood of Maer, and married Charles Darwin, her cousin, in 1839, in which year this portrait was painted.

- 15 Darwin, about the age of 30, the time of his marriage.
Reproduction of a drawing of unknown origin found in the Botany School, Cambridge, in 1929, closely identical with a watercolour by George Richmond, R.A. (1840), and probably his preliminary sketch (*cf.* p. 21).
- 16 Mrs. Darwin : photograph taken subsequently to the death of Darwin.
- *Mrs. Darwin and her son Leonard : photograph.
- 17 *Darwin : photograph on verandah at Down House.
- 18 Sir George Howard Darwin, F.R.S., a son of Charles Darwin (p. 4).
- 19 Darwin and his family : photographs (p. 4).
- 20 Family and grandchildren of Sir George Darwin : photograph.
- 21 Genealogy of the Darwin family.
- 22 *Erasmus Alvey Darwin (1804-81), elder brother of Charles Darwin, by George Richmond, R.A. (1850).
- 23 Alfred Russel Wallace : photograph.

Alfred Russel Wallace (1823-1913), O.M., F.R.S., naturalist, visited Amazon with Bates, 1848-52 ; Malay Archipelago, 1854-62 ; researches in zoology (notably zoogeography), botany, etc. ; also on origin of species on parallel lines and contemporaneously with Darwin. His first essay 'On the Tendency of Varieties to depart indefinitely from the Original Type' was sent to Darwin from the Moluccas, and was recognised by him as closely according with his own views, and both were communicated together to the Linnean Society in 1858. Wallace wrote also on social science, etc.

PRESIDENTIAL BANNERS OF THE BRITISH ASSOCIATION.—
The framed banners on the staircase and in the Old Dining-room belong to a series made for each President of the British Association from 1831 to 1931, the

presidency being an annual office. A list of those shown will be found on p. 25.

- 24 Darwin's house in Gower Street, London (1838-42), after its destruction by enemy action, 1940. Since demolished.
- 25 Darwin : cast from bust by Horace Montford.
Grandfather clock, by Joseph Bosley, London, in George II lacquer case.
- 26 Opening of Down House to the public, June 7, 1929.
In the central photograph, Sir Buckston Browne is seen addressing the company of guests and members of the General Committee of the British Association ; in the upper left-hand photograph, Sir Arthur Keith, F.R.S., and in the bottom centre photograph, Sir William Bragg, O.M., K.B.E., F.R.S., then President of the Association.
- 27 Thomas Henry Huxley (p. 22) : photograph.
- 28 *A Dutch Canal : photograph.
- 29 *Head of a girl : engraving.

The New Study

The New Study was added toward the end of Darwin's lifetime, in 1877. Darwin used the room as his study from about 1879, and the furniture from the Old Study was moved into it. The Old Study, however, is identified with almost the whole of his work at Down, and is now re-furnished, as will be seen, as he had it. This, the New Study, serves as a repository of objects which belonged to or are associated with him and his family.

Pictures and Statuary

West wall (left of entrance from hall) :

1-14 Portraits of Darwin.

1 *Mezzotint from a portrait by W. W. Ouless, R.A.

2 Photograph.

- 3 Enlarged photograph, formerly belonging to Darwin's grandson, W. R. Darwin.
 - 4 Signed photograph from Botany School, Cambridge.
 - 5 Photograph, the last taken.
 - 6 Drawing by Lawrence W. Baker, Boston, Mass.
 - 7 Engraving from portrait by the Hon. John Collier, of which there is a copy in the New Drawing-room.
 - 8 From photograph by O. G. Rejlander, presented to subscribers to *Nature*, June 4, 1874.
 - 9 Photograph by Major Leonard Darwin.
 - 10 Etching by G. Knell.
 - 11 Photograph at age of 51.
 - 12 Print by Emery Walker, from photograph, 1854 (age 45).
 - 13 Autographed print from Botany School, Cambridge.
 - 14 Photograph by Mrs. Julia Margaret Cameron, a well-known photographer and friend of the Darwin family.
- 15 Darwin : bust by Charles L. Hartwell, R.A.

‘Presented by Dr. Joseph Leidy II of Philadelphia, to the British Nation in memory of those American naturalists who came to the support of Charles Darwin upon the publication of “The Origin of Species” in 1859.’ Joseph Leidy (1823–91), uncle of the donor of this bust, was a noted American naturalist and palaeontologist, who worked mainly in the University of Pennsylvania and in Swarthmore College near Philadelphia, his birthplace.

North wall :

- 16 Library and Museum, Shrewsbury, showing statue of Darwin (*cf.* nos. 20, 21 below).
- Darwin's birthplace, The Mount, Shrewsbury.
- 17 Darwin : plaster plaque by Horace Montford.
 - 18 Miss Anna Seward, poetess, daughter of the Rev. Canon Thomas Seward (p. 31), and biographer of Dr. Erasmus Darwin.

*Barometer used by Darwin on voyage of H.M.S. *Beagle*.

Restored with the assistance of the Meteorological Office, by Messrs. Negretti & Zambra.

- 19 Darwin: original model of statue in University Museum, Oxford, by H. R. Hope-Pinker (1850-1927).
- 20 Unveiling by Lord Kelvin of statue of Darwin by H. Montford (*cf.* no. 16), outside the Museum, Shrewsbury.
- 21 Photograph of the above statue (*cf.* nos. 35, 36).
- 22 Darwin, aged 6, and his sister, Catherine: photograph of a drawing in chalk.
- 23 Commemorative statue in Le Puy, France, by Paul Dardé.
- 24 Darwin and Richard Owen: cartoons from *Vanity Fair*. (For Owen, see p. 26.)
- 25 Unveiling of statue of Darwin in the Natural History Museum, London (*cf.* Stand E).

The statue, by Sir Joseph Boehm, Bart., R.A. (1834-1890), was unveiled on June 9, 1885, by Huxley, as Chairman of the Darwin Memorial Committee, in the presence of many representatives of science and other public men. It was received on behalf of the trustees of the museum by the Prince of Wales.

Letter from Prof. E. B. Poulton, F.R.S., against removal of the statue.

- 26 Cartoons and verse from *Punch* (October 22 and December 6) after publication of Darwin's work on Worms, and poem on Darwin's death (April 29, 1882).

27 'Darwin,' sonnet by Dr. T. Wilson Parry, dedicated to Sir Buckston Browne and reprinted from *The Cambridge University Medical Society Magazine*, Michaelmas Term, 1929.

28 *MS. and two photographs of Darwin.

The MS. is the draft of an addition to a rule of the Friendly Club in the village of Down, of which Darwin acted as treasurer for thirty years.

29 *Illustrations of Pigeons, from Darwin's papers.

East wall :

30 The New Study : etching by A. Haig.

Showing this room as in Darwin's time, with some of the furniture and fittings removed from the Old Study.

31 Darwin : from bust (1869) by Thomas Woolner.

This cast was bought in Germany by the late Mr. Terrero, a grandson of General Rosas (p. 30). Restored by Charles L. Hartwell, R.A.

32 Darwin's birthplace, The Mount, Shrewsbury.

33 The Doctor's Walk, Shrewsbury.

34 Down House and grounds at various periods, before and during Darwin's time. (Continued on South wall).

South wall :

35 Bronze miniature of statue of Darwin by Horace Montford (1840-1919), outside the Museum, Shrewsbury.

36 Sculptor's model of above.

*Mahogany wardrobe, from Darwin's bedroom.

Case A

*Darwin's reckoning of receipts from sales of his books.

The total at the end of the year 1881 is £10,248.

*Notes on his will, and letters from his son William Erasmus Darwin on his estate.

Papers relating to Darwin's funeral in Westminster Abbey, April 26, 1882, and page of MS. of sermon by Harvey Goodwin, Bishop of Carlisle, in the Abbey on the Sunday after Darwin's death :—

‘ . . . I think that the interment of the remains of Mr. Darwin in Westminster Abbey is in accordance with the judgment of the wisest of his countrymen. . . . It would have been unfortunate if anything had occurred to give weight and currency to the foolish notion which some have diligently propagated, but for which Mr. Darwin was not responsible, that there is a necessary conflict between a knowledge of Nature and a belief in God. . . . ’

*Darwin's notes on plants on the lawn at Down House and seeds in the Sandwalk.

*Notes on his health and weight. Prescriptions.

*Notes on the well at Down House.

*The ‘ Worm Stone ’ : measuring instrument designed by Sir Horace Darwin (1877) and used therewith ; note-book of records ; photographs.

This is the stone, still in position on the lawn, used in making the observations on which were based the book by Darwin on ‘ Vegetable Mould and Earthworms ’ (1883), ‘ in which an estimate is given of the rate at which stones placed on the surface of the soil are buried by the action of earthworms.’ This quotation is from a paper ‘ On the Small Vertical Movements of a Stone laid on the Surface of the Ground,’ by Horace Darwin (*Proc. R.S.*, Vol. lxxviii, no. 446). The paper describes the experiment, which was begun in 1877.

*Packets of seeds from experimental collections, with letter from Alphonse de Candolle (1806–93), a Swiss botanist.

Some of these packets are dated, the earliest 1855, the latest 1876. They were received by Darwin from various parts of the world. A test of certain of the seeds was made at Kew Gardens in 1935, when it was found that some of those of three species of *Trifolium* still germinated.

*Case of beetles. *Scales.

*Snuff jars.

The snuff was kept by Darwin in the hall in order that he might check himself, by having to fetch it, from excessive use. Some of the snuff is still in the jars.

*Pewter teapot. *Wedgwood plate from dinner service.

*Hats.

Tureen given by Wedgwood to Joseph Wright's daughter.

*Microscope given by Darwin to John Lubbock, afterwards first Lord Avebury (p. 28).

Case B

Letter from Dr. Erasmus Darwin to Josiah Wedgwood.

*Miniatures of Dr. Erasmus Darwin, and of Dr. R. W. Darwin (3).

Elements of Geology, 2nd edition, 1842, by Charles Lyell, F.R.S. (vol. 1).

Annotated by Lyell. On the last fly-leaf is a note: 'Darwin recommends a short chap. on metallic veins, giving the present state of our knowledge. He denies seeing a beginning to each crop of species'—evidence of the early maturity (1842) of his theory of evolution.

Letter from Dr. R. W. Darwin to Miss Anna Seward on her biography of Dr. Erasmus Darwin.

Dr. Erasmus Darwin's Commonplace Book.

This is a volume properly prepared and published for use as a commonplace book, having a printed introduction indicating the advantages and the appropriate methods of keeping such a book. As kept by Dr. Erasmus Darwin, it contains medical records, notes on meteorology (especially winds), notes of inventions such as a weighing machine, an artificial bird worked by a spring, a navigation lock, a protractor, etc., remarks on a machine for perpetual motion, and memoranda on many other topics. The book was used by Darwin in compiling the life of his grandfather.

*Darwin's notebooks kept at Down House and containing nature notes, prescriptions for children, etc.

Below :

*Albums presented to Darwin by men of science in Germany and in Holland on his birthday, 1877.

Poem by Dr. Erasmus Darwin to Miss Seward's cat.

Case C

Darwin-Wallace celebration by the Linnean Society, July 1, 1908 : report and medal issued in connection therewith.

*Darwin's (and Lyell's) geological hammers, scientific instruments, etc., including home-made field magnifying glass.

*Mirror which was fixed outside a window of the Old Study, so that visitors could be seen.

*Mrs. Darwin's workbox. A lock of her hair.

*'Lady's companion' which belonged to Anne Elizabeth Darwin, the daughter who died in childhood. Brooch containing a lock of her hair.

The New Study : Cases C, D, Stand E

Small book made by Anne Darwin for her cousin, afterwards Mrs. Godfrey Wedgwood, bound in a fragment of a dress of Mrs. Darwin's.

- *Brooch which belonged to a sister of Darwin.
- *Snuff box, pens, private ledger, cheques, ruler, handkerchief, razor, paper-knives, dust and paste brushes.

Below :

'The Life and Works of Joseph Wright, A.R.A., commonly called "Wright of Derby,"' by William Bemrose, London and Derby, 1885 (*cf.* p. 30).

- *Illuminated address from the Birmingham Philosophical Society, offering its first honorary membership to Darwin.

Papers relating to centenary of the birth of Darwin and fiftieth anniversary of the publication of *The Origin of Species*, Cambridge, 1909.

Case D

Birds collected by Prof. C. J. Patten to illustrate Darwin's studies (*c.* 1856 especially) with regard to gradual changes in breeds and points of variation under domestication : corresponding types of plumage variations among individual species of domestic and wild birds.

Stand E

- *Examples of photostatic copies of letters from Darwin to Fritz Müller, a correspondent in Brazil.

- *Miscellaneous letters written by Darwin.

Letters and papers relating to the unveiling of the statue of Darwin at the Natural History Museum, London, 1885. Letters shown here bear the signatures of—

Matthew Arnold

Lord Lister.

Sir Richard Owen.

Canon Farrar.

Sir James Paget.

Sir Edward Poulton.

Sir Edwin Ray Lankester.

J. Romanes.

Sir Philip Magnus.

Rev. Adam Sedgwick.

Herbert Spencer.

Case F

*Relics of the voyage of the *Beagle* (see further, Case H).

Darwin served as naturalist on the surveying voyage of H.M.S. *Beagle*, 1831–36. He subsequently published the *Journal of a Naturalist* and work on the geology of the countries visited and (most notably) on coral islands, as well as contributing to the official narrative of the voyage, which ‘ must be regarded as the real preparation for his life-work ’ (Poulton).

Collecting boxes and bottle.

List of officers and men of the *Beagle*, dated October 1836, *i.e.* on completion of the voyage. Darwin’s name is at the top of the left-hand column.

List of specimens preserved in spirits of wine (3907 in all), in Darwin’s hand.

Case of pistols. Life preserver. Vasculum or collecting box for plants. Telescope.

Below :

Papers relating to centenary of the birth of Darwin and fiftieth anniversary of the publication of *The Origin of Species*, Cambridge, 1909.

Darwin matriculated at Christ’s College, Cambridge, in 1828, and took his degree in 1831.

*First and other editions of *The Origin of Species* and other works, and *Physical Geography*, by Sir John Herschel, the copy presented to Darwin by the author.

Case G

Nature studies by Elizabeth Hill Darwin (*c.* 1818), a second cousin of Darwin.

Inscription on Dr. Erasmus Darwin’s tomb.

Dr. Erasmus Darwin’s prescription book.

The New Study : Cases G, H

Ode on the Folly of Atheism, by Dr. Erasmus Darwin.

Dr. Erasmus Darwin's visiting cards and cardcase.

Dr. Erasmus Darwin's *Zoonomia, or The Laws of Organic Life* (2 vols).

Notebook by Emma Darwin, July 15, 1812, beginning a list of classes and orders of plants.

Letters of Susannah Wedgwood, Darwin's mother, written in 1765-1817.

Books from Dr. Erasmus Darwin's library.

Below :

MS. books of Swedish and Swiss subscribers to the Darwin Memorial.

Case H

Voyage of the *Beagle*. *Notebooks kept by Darwin during the voyage, from which was written the Diary of which the original MS. is shown.

Above :

H.M.S. *Beagle* in the Straits of Magellan.

Vice-Admiral Robert FitzRoy (1805-65).

Commander of H.M.S. *Beagle* (1828-36), during which period Darwin made his voyage in her (1831-36). Hydrographer, meteorologist, Governor of New Zealand (1843-45).

Stamps issued by the Government of Ecuador, 1935, in commemoration of Darwin's landing in the Galapagos Islands, 1835.

The peculiar fauna of the islands provided much of the foundation for Darwin's views on evolution.

Reproductions of pages from the Diary,

The New Drawing-room

The appearance of this room is similar to that in Darwin's time, as most of the furniture was his, and that which was not resembles his.

On the *grand piano, a Broadwood of 1854, Mrs. Darwin used to play to him. It was afterwards for many years in the possession of the Comtist Society in London.

The large bookcase contains a collection of scientific biographies, presented to the Association by Professor and Mrs. Allan Ferguson.

Pictures

South wall (on left of entrance) :

- 1 *Down House garden through an archway formerly on the site of this room. By Julia Wedgwood.
- 2 Down House, north front, c. 1820-30 (the wing of which this room forms part being an addition by Darwin).
- 3 *Down House garden in 1886, by Julia Wedgwood, a niece of Darwin.
- 4 Dr. Erasmus Darwin, by an unnamed artist.

East wall (facing garden) :

- 5 Sir Francis Sacheverel Darwin (1786-1859), by an unnamed artist.

One of the seven children of Dr. Erasmus and Elizabeth Darwin. Godfather to his nephew, Francis Galton. Traveller in Mediterranean countries, antiquarian and naturalist.

- 6 *Silhouettes : Dr. Erasmus Darwin and his son Erasmus, playing chess ; Mrs. Chandos Pole, afterwards wife of Dr. Erasmus Darwin.
- 7 Darwin, after the portrait by George Richmond (1840).

- 8 *'The Mumbles,' by Syer of Bristol.
- 9 *Mrs. Wedgwood : a plaque in 'Old Wedgwood' biscuit ware, by John Flaxman, R.A.
- 10 *Catherine Wedgwood (1774-1823) : miniature.
Daughter of Josiah Wedgwood (see No. 11, below).
- 11 Josiah Wedgwood, on his celebrated Arab stallion 'Mambrino.' Aquatint after George Stubbs (p. 30).
- 12 Pair of sepia drawings of Breadsall Priory, home of Dr. Erasmus Darwin.
- 13 *'The Itchen,' by A. Goodwin.

North wall :

Darwin and Huxley : copies of his original portraits by the Hon. John Collier.

These were commissioned by Sir Buckston Browne. THOMAS HENRY HUXLEY, (1825-95), F.R.S., P.C. ; biologist ; Hunterian professor, Roy. Coll. of Surgeons, 1863-9 ; Fullerian professor, Royal Institution, 1863-7 ; Rector, Aberdeen Univ., 1872-4 ; President, British Assoc., 1870, Roy. Soc. 1883-5 ; one of Darwin's strongest supporters and closest friends.

The Old Study

This room was Darwin's study until the later part of his life, when the north wing of the house was built. Here by far the greater part of his work was done. The appearance of the room is as it was in his time, for almost all the furnishing is original. The restoration was made possible by photographs taken by Major Leonard Darwin in his father's lifetime.

*The central table was his work-table and the round table with revolving top held specimens in the drawers. Darwin wrote sitting in the iron-framed armchair, using

the cloth-covered writing board thereon. A handkerchief hung from the chair-back. The low seat in the window, previously his father's or grandfather's, was used by him when at work with the microscope on the window-shelf. The ink-pot, hygrometer, and some of the bottles were his. The fender stool and spittoon stood where they are. The armchair was Dr. R. W. Darwin's ; the club-shaped table was Darwin's, and the terrestrial globe represents one which stood there.

*The books which fill the shelves and cupboards are the major part of Darwin's library, which was bequeathed by his son, Sir Francis Darwin, F.R.S., to the Professor of Botany in the University of Cambridge for the time being. They were placed here on loan by Sir Albert Seward, F.R.S., when he was professor, and the loan was confirmed by his successor, Prof. F. T. Brooks, F.R.S.

*The framed maps show Darwin's own markings and notes in connection with his work on coral reefs ; they were taken, as illustrating this, from a portfolio received from the Botany School, Cambridge.

North (fireplace) wall :

Lavatory enclosure, as fitted by Darwin.

*Sir Joseph Hooker, F.R.S. : photograph.

Sir Joseph Dalton Hooker (1817-1911), F.R.S., K.C.S.I., 1877 ; G.C.S.I., 1897 ; Assistant Director, Kew Gardens, 1855-65 ; Director, 1865-85 ; President, Royal Society, 1873-78 ; President of the British Association, 1868 (Norwich Meeting).

*Sir Charles Lyell, F.R.S. : engraving.

Sir Charles Lyell (1797-1875), F.R.S. ; Kt., 1848 ; Bart., 1864 ; Professor of Geology, King's College, London, 1831-33 ; President, Geological Society, 1835, 1849 ; President of the British Association, 1864 (Bath Meeting).

The Old Study

- *Josiah Wedgwood : engraving (autographed).
- *Date calendar. *Watchstand.
- *Brass candlestick.
- *Letter clip, in the form of a hand.
Sir Joseph Hooker, F.R.S. : Wedgwood medallion.
- *Aneroid barometer.
- *Dr. Erasmus Darwin : plaster plaque.
- *Reading lamp.
- *Mrs. Darwin : photograph.
Coal scuttle. *Spittoon.
- *Nest of Drawers.
East (window) wall :
- *Erasmus Alvey Darwin (*cf.* p. 10).
- *Dr. R. W. Darwin : engraving.
Son of Samuel Fox and Ann Darwin, cousin and correspondent of Darwin.
William Darwin Fox, M.A., priest (1805-80).
- *Bookcase.
- *Leonardo da Vinci : engraving.
South (bookshelf) wall :
- *The Old Study in Darwin's time : photograph by Major Leonard Darwin.
Dr. Erasmus Darwin : engraving.
- *Darwin : photograph by Major Leonard Darwin.

The Old Dining-room

This was the dining-room until the addition of the north wing.

*The dining table and armed dining chairs were Darwin's, and the elbow chair belonged to William Darwin, his eldest son.

For the rest, this room contains presidential banners, portraits, etc., relating to the British Association.

On the door is the original drawing from the College of Arms of the armorial bearings granted to the Association in 1937, of which a reproduction in stained glass is hung in one of the windows. The blazon is as follows :

Arms : Azure ten stars, two of six, four of five, and four of four points Argent, (representing the constellation of Libra [The Scales] ; over all a Balance Or.

Motto : Sed Omnia Disposuisti.

The motto is taken from *Wisdom of Solomon* ii, 20 (' But Thou hast ordered all things in measure and number and weight ').

The presidential banners of the Association (*cf.* p. 10) include those for Viscount Milton, afterwards 3rd Earl Fitzwilliam, president at the first meeting of the Association (1831) ; Canon Vernon Harcourt and Sir David Brewster, founders of the Association and presidents in 1839 and 1850 respectively ; Lyell, Huxley, Hooker and Lubbock (afterwards Lord Avebury), shown here as intimate friends of Darwin ; George and Francis Darwin, his sons ; Lord Rayleigh, Lister (afterwards Lord Lister), William Bateson, Sir Ernest (afterwards Lord) Rutherford, H.R.H. The Prince of Wales, Sir Arthur Keith, and General the Rt. Hon. J. C. Smuts, president at the Centenary Meeting (1931) ; and on the staircase those for Sir Douglas Galton, Sir Roderick Murchison, a founder of the Association, Sir William Thomson (afterwards Lord Kelvin), Sir Oliver Lodge, and Professor John Phillips, first secretary of the Association. The banners bear sometimes the president's own arms (as in the case of the Darwins), sometimes those of the place of meeting, sometimes a representative device.

The Old Dining-room

The portrait engravings on the north and west walls of this room belong to a series of eminent scientific workers and supporters of science, executed by T. H. Maguire in 1849-51, and published in connection with the meeting of the Association at Ipswich in 1851. Those shown here include :—

Darwin, in 1849 (aged 40).

About this period Darwin was attending meetings of the Association. Later, when otherwise he must have been elected to the Presidency, his health forbade.

Rev. Prof. William Buckland, F.R.S., President of the Association 1832 ; Professor of Mineralogy and Geology, Oxford ; Dean of Westminster.

Rev. Prof. Adam Sedgwick, F.R.S., President 1833 ; Woodwardian Professor of Geology, Cambridge.

Sir Roderick Impey Murchison, Bt., K.C.B., F.R.S., President 1846 ; Director-General, Geological Survey.

Sir George Biddell Airy, K.C.B., President R.S., President 1851 ; Astronomer Royal.

Sir Edward Sabine, K.C.B., President R.S., President 1852 ; astronomer and voyager ; experiments and surveys in terrestrial magnetism.

Sir Richard Owen, K.C.B., F.R.S., President 1858 ; Superintendent, Natural History Museum, London.

Albert, Prince Consort, F.R.S., President 1859.

Sir Charles Lyell, Bt., F.R.S., President 1864 (p. 23).

Prof. John Phillips, F.R.S., first Secretary of the Association 1831 ; President 1865.

Sir John Hooker, G.C.S.I., President R.S., President 1868.

Prof. William Benjamin Carpenter, C.B., F.R.S., President 1872 ; botanist, zoologist and physiologist.

Prof. George James Allman, F.R.S., President 1879 ; Regius Professor of Natural History, Edinburgh.

Sir Lyon (afterwards Lord) Playfair, G.C.B., F.R.S., President 1885 ; Professor of Chemistry, Edinburgh ; M.P., Postmaster-General, Deputy Speaker of House of Commons, Lord-in-Waiting to Queen Victoria.

Sir Robert Stowell Ball, F.R.S., Royal Astronomer of Ireland 1874-92 ; Professor of Astronomy and Geometry, Cambridge, 1892.

Edward Doubleday (1811-49), naturalist and traveller in North America ; Society of Friends.

Sir William Jackson Hooker, F.R.S., botanist, Director of Royal Botanical Gardens, Kew ; father of Joseph Hooker.

Edward Forster (1765-1848), ornithologist and botanist.

Prof. Michael Faraday, F.R.S., Professor of Chemistry, Royal Institution, 1827, who by his discoveries in electromagnetism opened the way to the vast modern development of electrical industries.

Prof. John Obadiah Westwood, Hope Professor of Zoology, Oxford, 1861 ; a correspondent of Darwin.

Robert Brown, F.R.S., botanist, Keeper of Botanical Department, British Museum, 1827-58 ; a friend and helper of Darwin.

Rev. Prof. John Stevens Henslow, F.R.S., Professor of Mineralogy and of Botany, Cambridge. Darwin was his pupil and friend, and Henslow introduced him to Capt. Fitzroy of H.M.S. *Beagle*.

Prof. Edward Forbes, F.R.S., Professor of Botany, King's College, London, 1842 ; Professor of Natural History, Edinburgh, 1854. Founded the 'Red Lions' dining club in the British Association, 1839.

A series of *Vanity Fair* cartoons of subjects who became Presidents of the Association was mainly presented by subscription among members of the Council. The series includes :

Sir Roderick Impey Murchison, Bt., F.R.S., President 1846
(p. 26).

The Old Dining-room

- The Earl of Harrowby, K.G., F.R.S., President 1854 ;
Lord Privy Seal 1855-57.
- The Duke of Argyll, F.R.S., President 1855 ; Postmaster-
General, Secretary of State for India, etc. ; geologist of
the catastrophic school, opponent of Darwin.
- Sir William Robert Grove, P.C., F.R.S., President 1866 ;
physicist and judge.
- The Duke of Buccleuch, P.C., F.R.S., President 1867 ; Lord
Privy Seal 1842-46.
- Prof. T. H. Huxley, F.R.S., President 1870 (p. 22).
- Prof. Sir William Thomson, F.R.S., President 1871 ; after-
wards Baron Kelvin, O.M., G.C.V.O. ; Professor of
Natural Philosophy, Glasgow ; President Royal Society.
- Prof. John Tyndall, F.R.S., President 1874 ; Professor of
Natural Philosophy and Superintendent, Royal Institu-
tion.
- Sir John Lubbock, Bt., F.R.S., President 1881 ; afterwards
Baron Avebury ; anthropologist, President of the
Institute of Bankers, Chairman of the London County
Council ; as M.P. initiated statutory bank holidays ;
lived at High Elms near Downe ; a friend of Darwin
from boyhood.
- Prof. Lord Rayleigh, O.M., F.R.S., President 1884 ; Cavendish
Professor of Physics, Cambridge ; Professor of Natural
Philosophy, Royal Institution.
- Sir Lyon Playfair, F.R.S., President 1885 (p. 27).
- Sir Frederick Joseph Bramwell, Bt., F.R.S., President 1888 ;
President, Institute of Civil Engineers, 1874.
- Sir William Huggins, O.M., K.C.B., President R.S., President
1891 ; astronomer.
- Sir John Burdon-Sanderson, Bt., F.R.S., President 1893 ;
Regius Professor of Medicine, Oxford.
- The Marquis of Salisbury, K.G., F.R.S., President 1894 ;
Prime Minister 1885, 1886-92, 1895-1900, 1900-02.
- Sir William Crookes, K.C.B., President R.S., President 1898 ;
discoveries in molecular physics, etc.

Rt. Hon. James Balfour, O.M., K.G., F.R.S. (afterwards Earl Balfour), President 1904 ; Prime Minister 1902-05.

Prof. Sir Edwin Ray Lankester, K.C.B., F.R.S., President 1906 ; Director, Natural History Museum, London.

Prof. Sir William Ramsay, K.C.B., F.R.S., President 1911 ; Professor of Chemistry, University College, London.

Sir Oliver Joseph Lodge, F.R.S., President 1913 ; Professor of Physics, University College, Liverpool ; Principal, Birmingham University.

Also in this room : *East (window) wall* :

Lord Avebury (p. 28), portrait engraving.

West wall :

H.R.H. The Prince of Wales, K.G., F.R.S., President 1926 ; signed photograph, letters to the Association, signed copy of his presidential address.

Sir William George Armstrong (afterwards Baron Armstrong), F.R.S., President 1863, engineer, naval and gun constructor, etc. (photograph).

Sir William Grove, P.C., F.R.S. (p. 28) (photograph).

Sir Charles Williams Siemens, President 1882 ; researches in applied electricity, etc. (photograph).

The British Association, probably at Swansea, 1848 ; cartoons by John Padley of Swansea.

Alcove :

Darwin : the *Vanity Fair* cartoon, with letterpress.

Hon. Sir Charles Algernon Parsons, K.C.B., F.R.S., President 1919 ; creator of the steam turbine, researches on high pressures, temperatures, etc. : sketch by Sir Richard Paget.

Sir Charles Lyell, watercolour by J. Wright (p. 23).

Leonard Horner, F.R.S.

A diary of the Southampton Meeting of the British Association, 1846, is in the possession of the Association, kept by Joanna B. Horner. Her father, Leonard Horner, F.R.S., was President of the Geological Society and of the Geological Section of the British Association, and the friends mentioned by her in the diary include Lyell and Mrs. Lyell, Darwin and Mrs. Darwin, Herschel, Murchison, and others. The presence of the Prince Consort is also referred to.

Sir Andrew Crombie Ramsay, F.R.S., President 1880, Director-General, Geological Survey, 1871.

Cartoon by Harry Furniss, from *Punch*, September 20, 1890 ; Leeds Meeting of the Association.

Cartoon by George Morrow, from *Punch*, September 16, 1936 ; Blackpool Meeting of the Association, Sir Josiah Stamp, President.

Photographs of recent Presidents of the Association, in series from 1901, are shown.

The Donor's Room

This was the drawing-room in Darwin's time until the new drawing-room was built ; it then became the dining-room. It now bears the name of The Donor's Room, having been furnished almost wholly by Sir Buckston Browne from his collection. The pictures and furniture are mainly representative of the era of the Darwin family from the birth of Erasmus to the death of Charles, 1731-1882. Most of the pictures are by Joseph Wright, A.R.A., of Derby (1734-96), and George Stubbs, R.A. (1724-1806), associates of Josiah Wedgwood and Dr. Erasmus Darwin.

Pictures (numbered from right-hand side of entrance) :

- 1 General Rosas, friend of Darwin in Argentina (voyage of the *Beagle*).

- 2 The Rev. Thomas Seward, M.A., by Joseph Wright.
Canon Residentiary of Lichfield, Prebendary of Pipe Parva and Rector of Eyam. Buried in Lichfield Cathedral. Epitaph by Sir Walter Scott. A friend of Samuel Johnson. Father of Anna Seward the poetess (p. 12).
- 3 'Pumpkin,' by George Stubbs.
George Stubbs was the great horse painter of his day.
- 4 Robert Emmet (1778-1803).
Early English School. A 'United Irishman' and a connection of Sir Buckston Browne's family.
- 5 Reading by Candlelight, by Joseph Wright.
- 6 Mrs. Harbottle (1790)-1885, by W. H. Pickersgill, R.A. (1782-1875).
She was born Lucy Pope, and was Sir Ray Lankester's and Sir Buckston Browne's great-aunt.
- 7 Boy and guinea-pig, attributed to Joseph Wright.
- 8 'The Connoisseur and Tired Boy,' by Joseph Wright.
A print after the above.
Examining a picture (one of William van de Velde's?) by candlelight.
- 9 Joseph Wright, A.R.A., of Derby. A portrait bust of the artist by himself.
- 10 A Blacksmith's Shop, by Joseph Wright.
Exhibited 1771 at the Society of Artists of Great Britain. Formerly at Lord Palmerston's house, 'Brooklands,' Romsey.
Engraving of the above, by Richard Earlom (1743-1882).
- 11 Horse surprised by a Lion, by George Stubbs.
The prelude to the scene on the Wedgwood enamel plaque (no. 12).

- 12 *Lion attacking a Horse*, by George Stubbs. Dated 1769. Octagon $9\frac{1}{2}$ in. by 14 in.

George Stubbs witnessed this scene in Morocco. Josiah Wedgwood made enamels like this on copper plates, at Burslem, for Stubbs to paint on. Stubbs prepared his own pigments. When successfully fired these pictures are indestructible.

- 13 Wedgwood plaques.

- 14 *The Academy*, by Joseph Wright.

By candlelight, group of students (one the artist) and female model. Exhibited 1769 at the Society of Artists of Great Britain.

- 15 *Mrs. Chandos-Pole*, by Joseph Wright.

She became the second wife of Dr. Erasmus Darwin.

- 16 *Sir Buckston Browne, F.R.C.S.*, by Robert Darwin, great grandson of Charles Darwin.

- 17 *Dr. Erasmus Darwin, F.R.S.*, by Joseph Wright.

- 18 *Breadsall Priory*. On panel. Artist unknown. Figures probably Dr. and Mrs. Erasmus Darwin.

Here on April 18, 1802, Dr. Erasmus Darwin died, aged 70.

- 19 *Prints of Downe and Orpington churches*, 1786.

Two of a series illustrating the major sacraments: that of Downe shows a christening party; that of Orpington a funeral.

FURNISHINGS FROM SIR BUCKSTON BROWNE'S COLLECTION

Furniture

Sheraton mahogany dining table, inlaid with satinwood.

Sheraton mahogany side-board.

Sheraton mahogany enclosed toilet table, banded, engraved and coloured in satinwood ; folding top enclosing a mirror, compartments and boxes, a drawer beneath fitted for hand basin. Formerly at Cassiobury Park.

Chippendale walnut settee.

Chippendale walnut dining chair.

Pair of Chippendale mahogany splay-backed dining chairs.

Pair of mahogany dining chairs of Chippendale design.

Pair of Chippendale mahogany ladder-backed dining chairs.

Pair of Chippendale mahogany armchairs, on cabriole legs and club feet.

Formerly in Lord Melbourne's library at Broomfield Hall, Hertfordshire.

Old English ladder-back chair.

Carolean fruitwood chair, cane-seated.

Queen Anne walnut dining chairs (four).

Exhibited at the Burlington Fine Arts Club.

Georgian mahogany side-table.

Georgian mahogany and brass wine-cooler.

Chippendale mahogany bidet.

Mahogany fire-screen of early Victorian period.

Walnut ottoman stool.

Clocks

Chiming clock by Goudt of Amsterdam, 18th century, in walnut and inlaid case, surmounted by figures of Atlas and two heralds. Playing six Dutch tunes.

Early 18th-century grandfather clock, by Charles Cabrier, London. With 8-day striking, calendar and lunar movement. Scratched on back of dial 'Cleaned by Tomerling 1772.'

French mantelpiece clock in marble and ormolu.

Ornaments, etc.

Examples of Derbyshire Spar.

Derbyshire Spar is an amethystine fluorate of lime, only found at Castleton in Derbyshire, and all but exhausted. It was found

and worked by the Romans, and its beauty was rediscovered in 1743, when the taste for the carved crystal set in, and it became popular. Jane Austen and George Eliot refer to it in their novels. The French imported it and decorated it with ormolu, and it was to them that the spar owes its popular name of 'Blue John,' as they called it Bleu-jaune, *i.e.* blue-yellow.

Pair of Bloor Derby pot-pourri vases (*c.* 1782) and covers.

Belonged to Sir Buckston Browne's great-grandfather, Robert Hadfield (1756-1807), of Sheffield.

Pair of carved walnut and gilt Italian pedestals.

Bronze male figures by Sabotina, Naples, 1888-89.

Old Italian bronze urn, copy of the Warwick Vase.

Georgian Sheffield plate candelabra and candlesticks.

Groups of dogs, by Pierre Jules Mêne (*b.* 1810), French sculptor.

Bronze figure of a stag, by Antoine Louis Barye (*b.* 1796), French sculptor.

Papier-maché letter-holders, inlaid with mother-of-pearl.

Rockingham vases (spill-holders).

Cork crystal lustres.

French 'Jacob Petit' figures (scent bottles).

Bust of Mrs. Buckston Browne, wife of the donor, by Charles L. Hartwell, R.A.

LETTERS AND PAPERS

In addition to letters exhibited, the Association possesses many original letters of Darwin to a number of correspondents, including A. C. Ramsay, Daniel Oliver, Hooker, W. B. Carpenter, Tyndall, Huxley, Lubbock and others. Here also are letters written to his family during the voyage of the *Beagle*. There are also reproductions of his letters to Fritz Müller, a correspondent in Brazil—a long series acquired and presented by Prof. H. Fairfield Osborn; the originals are deposited in the British Museum. There are letters of Dr. Erasmus Darwin and other members

and connections of the family, genealogical and other notes, and a variety of MS. and printed matter written by or concerned with Darwin and his work. There are T. H. Huxley's own catalogue of his books, and his collection of critiques of Darwin. There is a small collection of books on Darwin and subjects appropriate to his work. Early records of the British Association, from its foundation in 1831, are kept here.

GIFTS

A register of donors to the collection is kept in the house : the list includes upwards of 100 names in addition to members of the Darwin family and Sir Buckston Browne. The Down House Committee of the British Association will welcome appropriate gifts to the collection.

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